

THAT WHICH IS CLAIMED IS:

1. A pre-warn vehicle security device for a vehicle comprising a data communications bus, an alert indicator, and an alarm controller interfacing with the data communications bus and causing the alert indicator to generate an alarm indication responsive to a high security threat level, the pre-warn vehicle security device comprising:

a housing;

a multi-stage sensor carried by said housing for sensing the high security threat level and communicating the sensed high security threat level to the alarm controller via the data communications bus, and for sensing a low security threat level lower than the high security threat level; and

a pre-warn indicator carried by said housing and connected to said multi-stage sensor for generating a pre-warn indication responsive to the sensed low security threat level.

2. The pre-warn vehicle security device of Claim 1 wherein the pre-warn indication has a shorter duration than the alarm indication.

3. The pre-warn vehicle security device of Claim 1 wherein the pre-warn and alarm indications are audible, and wherein the pre-warn indication has a lesser volume than the alarm indication.

4. The pre-warn vehicle security device of Claim 1 further comprising a pre-warn emulator for

generating a high security threat level signal on the data communications bus responsive to the sensed high security threat level.

5. The pre-warn vehicle security device of Claim 4 wherein the alarm controller generates a confirmation signal on the data communications bus upon switching between armed and disarmed operational modes, and wherein said pre-warn emulator causes said pre-warn indicator to provide a confirmation indication responsive to the confirmation signal.

6. The pre-warn vehicle security device of Claim 4 wherein said pre-warn emulator switches between armed and disarmed operational modes based upon a mode change signal on the data communications bus, and wherein said pre-warn emulator causes said pre-warn indicator to provide a confirmation indication upon switching between armed and disarmed operational modes.

7. The pre-warn vehicle security device of Claim 4 further comprising a signal enabler for enabling said pre-warn emulator to operate using a desired set of signals for communicating with the alarm controller via the data communications bus from a plurality of sets of signals for different alarm controllers.

8. The pre-warn vehicle security device of Claim 1 wherein said multi-stage sensor comprises a multi-stage shock sensor.

9. The pre-warn vehicle security device of Claim 1 wherein said pre-warn indicator comprises a siren.

10. A pre-warn vehicle security device for a vehicle comprising a data communications bus, an alert indicator, and an alarm controller interfacing with the data communications bus and causing the alert indicator to generate an alarm indication responsive to a high security threat level, the pre-warn vehicle security device comprising:

a housing;

a multi-stage sensor carried by said housing for sensing the high security threat level and communicating the sensed high security threat level to the alarm controller via the data communications bus, and for sensing a low security threat level lower than the high security threat level;

a pre-warn emulator for generating a high security threat level signal on the data communications bus responsive to the sensed high security threat level; and

an pre-warn indicator carried by said housing and connected to said multi-stage sensor for generating a pre-warn indication responsive to the sensed low security threat level, the pre-warn indication having a shorter duration than the alarm indication.

11. The pre-warn vehicle security device of Claim 10 wherein the pre-warn and alarm indications are audible, and wherein the pre-warn indication has a lesser volume than the alarm indication.

12. The pre-warn vehicle security device of Claim 10 wherein the alarm controller generates a confirmation signal on the data communications bus upon switching between armed and disarmed operational modes, and wherein said pre-warn emulator causes said pre-warn indicator to provide a confirmation indication responsive to the confirmation signal.

13. The pre-warn vehicle security device of Claim 10 wherein said pre-warn emulator switches between armed and disarmed operational modes based upon a mode change signal on the data communications bus, and wherein said pre-warn emulator causes said pre-warn indicator to provide a confirmation upon switching between armed and disarmed operational modes.

14. The pre-warn vehicle security device of Claim 10 further comprising a signal enabler for enabling said pre-warn emulator to operate using a desired set of signals for communicating with the alarm controller via the data communications bus from a plurality of sets of signals for different alarm controllers.

15. The pre-warn vehicle security device of Claim 10 wherein said multi stage sensor comprises a multi-stage shock sensor.

16. The pre-warn vehicle security device of Claim 10 wherein said pre-warn indicator comprises a siren.

17. A pre-warn vehicle security device for a vehicle comprising a data communications bus, an alert indicator, a vehicle light, and an alarm controller interfacing with the data communications bus and causing the alert indicator to generate an alarm indication responsive to a high security threat level, the alarm controller also for switching between armed and disarmed operational modes and causing the vehicle light to generate a confirmation indication based thereon, the pre-warn vehicle security device comprising:

a housing;

a multi-stage sensor carried by said housing for sensing the high security threat level and communicating the sensed high security threat level to the alarm controller via the data communications bus, and for sensing a low security threat level lower than the high security threat level; and

an audible pre-warn indicator carried by said housing and connected to said multi-stage sensor for generating a pre-warn indication responsive to the sensed low security threat level, and for generating an audible confirmation indication responsive to the alarm controller switching between armed and disarmed operational modes.

18. The pre-warn vehicle security device of Claim 17 wherein the pre-warn indication has a shorter duration than the alarm indication.

19. The pre-warn vehicle security device of Claim 17 wherein the alarm indication is audible, and

wherein the pre-warn indication has a lesser volume than the alarm indication.

20. The pre-warn vehicle security device of Claim 17 further comprising a pre-warn emulator for generating a high security threat level signal on the data communications bus responsive to the sensed high security threat level.

21. The pre-warn vehicle security device of Claim 20 wherein the alarm controller generates a confirmation signal on the data communications bus upon switching between armed and disarmed operational modes, and wherein said pre-warn emulator causes said pre-warn indicator to provide the confirmation indication responsive to the confirmation signal.

22. The pre-warn vehicle security device of Claim 20 wherein said pre-warn emulator switches between armed and disarmed operational modes based upon a mode change signal on the data communications bus, and wherein said pre-warn emulator causes said pre-warn indicator to provide a confirmation upon switching between armed and disarmed operational modes.

23. The pre-warn vehicle security device of Claim 20 further comprising a signal enabler for enabling said pre-warn emulator to operate using a desired set of signals for communicating with the alarm controller via the data communications bus from a plurality of sets of signals for different alarm controllers.

24. The pre-warn vehicle security device of Claim 17 wherein said multi-stage sensor comprises a multi-stage shock sensor.

25. The pre-warn vehicle security device of Claim 17 wherein said audible pre-warn indicator comprises a siren.

26. A pre-warn vehicle security device for a vehicle comprising a data communications bus and at least one vehicle device interfacing with the data communications bus and generating a mode change signal on the data communications bus, the pre-warn vehicle security device comprising:

- a housing;

- a multi-stage sensor carried by said housing for sensing the high security threat level, and for sensing a low security threat level lower than the high security threat level;

- an alarm circuit connected to said multi-stage sensor and interfacing with the data communications bus for switching between armed and disarmed operational modes responsive to the mode change signal; and

- an indicator carried by said housing and connected to said alarm circuit;

- said alarm circuit when in the armed operational mode causing said indicator to generate a pre-warn indication responsive to the sensed low security threat level, and to generate an alarm indication responsive to the sensed high security threat level.

27. The pre-warn vehicle security device of Claim 26 wherein said alarm circuit further causes said indicator to generate a confirmation indication upon switching between armed and disarmed operational modes.

28. The pre-warn vehicle security device of Claim 26 wherein the pre-warn indication has a shorter duration than the alarm indication.

29. The pre-warn vehicle security device of Claim 26 wherein the pre-warn and alarm indications are audible, and wherein the pre-warn indication has a lesser volume than the alarm indication.

30. The pre-warn vehicle security device of Claim 26 wherein said multi-stage sensor comprises a multi-stage shock sensor.

31. The pre-warn vehicle security device of Claim 26 wherein said indicator comprises a siren.

32. A method for upgrading a vehicle security system in a vehicle comprising a data communications bus, the vehicle security system comprising an alert indicator and an alarm controller for interfacing with the data communications bus and causing the alert indicator to generate an alarm indication responsive to a high security threat level, the method comprising:

installing a pre-warn vehicle security device in the vehicle comprising
a housing,

a multi-stage sensor carried by the housing for sensing the high security threat level and communicating the sensed high security threat level to the alarm controller via the data communications bus, and for sensing a low security threat level lower than the high security threat level, and

a pre-warn indicator carried by the housing and connected to the multi-stage sensor for generating a pre-warn indication responsive to the sensed low security threat level.

33. The method of Claim 32 wherein the pre-warn indication has a shorter duration than the alarm indication.

34. The method of Claim 32 wherein the pre-warn and alarm indications are audible, and wherein the pre-warn indication has a lesser volume than the alarm indication.

35. The method of Claim 32 wherein the pre-warn vehicle security device further comprises a pre-warn emulator for generating a high security threat level signal on the data communications bus responsive to the sensed high security threat level.

36. The method of Claim 35 wherein the alarm controller generates a confirmation signal on the data communications bus upon switching between armed and disarmed operational modes, and wherein the pre-warn emulator causes the pre-warn indicator to provide a

confirmation indication responsive to the confirmation signal.

37. The method of Claim 35 wherein the pre-warn emulator switches between armed and disarmed operational modes based upon a mode change signal on the data communications bus, and wherein the pre-warn emulator causes the pre-warn indicator to provide a confirmation indication upon switching between armed and disarmed operational modes.

38. The method of Claim 35 wherein the pre-warn vehicle security device further comprises a signal enabler for enabling the pre-warn emulator to operate using a desired set of signals for communicating with the alarm controller via the data communications bus from a plurality of sets of signals for different alarm controllers.

39. The method of Claim 32 wherein the pre-warn vehicle security sensor comprises at least one of a motion sensor and a shock sensor.

40. The method of Claim 32 wherein the pre-warn indicator comprises a siren.